# DEBBIE A. NIEMEIER, P.E., PH.D.

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#### **EDUCATION**

University of Washington, Seattle, WA

Ph.D., Civil and Environmental Engineering, 1994, Minor: Statistics

University of Maine, Orono, ME

M.S., Civil Engineering, 1991, Minor: Geographic Information Systems

University of Texas, Austin, TX B.S., Civil Engineering, 1982

### **EMPLOYMENT**

University of California, Davis, CA, Civil & Environmental Engineering

Jul 2001-July 2004 Department Chair
Jul 2002-Present Professor

Jul 1998-Present Director, UC Davis-Caltrans Air Quality Project

Jul 1999-Jul 2001 Vice-Chair Jul 1998-Jul 2002 Associate Professor

Jan 2000-Sept 2001 University of California, Davis, CA, Office of the Provost

Faculty Assistant to the Provost (50% appt.)

Jul 1994-Jul 1998

University of California, Davis, CA, Civil & Environmental Engineering, Assistant Professor

Jul 1991-Jul 1994

University of Washington, Seattle, Civil & Environmental Engineering, Research Assistant

1987-1990 T.Y. Lin International, Falmouth ME, Transportation Project Manager

1985-1987 **City of San Marcos, San Marcos, TX,** *Traffic Engineer* 1978-1987 **Texas Department of Highways, Austin, TX,** *Engineer* 

# **PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers

Transportation Research Board

Association for Environmental Engineers

American Association for the Advancement of Science

Women in Engineering Leadership Institute, Board Member

Member, UC Davis Graduate Faculty: Elect.& Computer Engrg,

Computer Science, Atm. Science, Ecology, Geography

#### HONORS

Aldo Leopold Leadership Award, 2005

Chancellor's Fellow, 2000

National Science Foundation, CAREER Award, 1997

Outstanding Mentor Award, UC Davis Consortium for Res. for Women, 1997

Outstanding Faculty Advisor, UC Davis, College of Engineering, 1995

ENO Foundation, Fellow, 1993 TransNOW Fellowship, 1992-1994

**PROFESSIONAL** Texas: Professional Engineer

**REGISTRATION/TRAINING**Campus Mediator

# **EDITORIAL SHIPS**

Editorial Advisory Board, Transportation Research, Part B, 2003-Present Editorial Advisory Board, Journal of Urban Planning and Design, 2004-Present Editorial Advisory Board, Journal of Air and Waste Management, 2001-2004

### **PATENTS**

A Microfabricated Ionizer Structure Based on Unipolar Corona Discharge, (Pending, Tien, Chua, Niemeier, Wexler)

A Unipolar Corona Discharge Microfabricated Ionizer for Gases at Atmospheric Pressure and Composition (*Provisional Patent Filed, Tien, Chua, Niemeier, Wexler*)

## **DISSEMINATION OF RESEARCH**

# A. PEER-REVIEWED PUBLICATIONS (<sup>G</sup> Graduate Student/PostDoc)

In-press

- 1. GLam, T., **D. Niemeier** (*In-press*) Large-scale simulation exploring the effectiveness of common transportation-land-use policies on air quality, *Transportation Research Part D*
- 2. <sup>G</sup>Gao, O., B. Holmén, **D. Niemeier** (*In-press*) Nonparametric Factorial Analysis of Daily Weigh-in-Motion Traffic: Implications for the Ozone Weekend Effect in Southern California, *Atmospheric Environment*
- 3. GHendren, P., **D. Niemeier** (*In-press*) Identifying Peer States for Transportation System and Policy Analysis, *Transportation*
- 4. Chen, C. and **D. Niemeier** (*In-press*) A mass point vehicle scrappage model, *Transportation Research B*
- 5. Eisinger, D., **D. Niemeier** (*In-press*) Transportation Control Measures (TCMs): Federal requirements and SIP development considerations, *Transportation Research Record*, Transportation Research Board, Washington DC: 73-82
- 6. **D. Niemeier** and Y. Zheng<sup>G</sup> (*In-press*) Improving the spatial distribution of vehicle emissions inventories using finer grid cell resolution, *Environmental Science and Technology*
- 7. GZheng, Y., GWang, B., H.M. Zhang, **D. Niemeier** (*In-press*) A new gridding method for zonal travel activity and emissions using bicubic spline interpolation, *Transportation Research B*
- 8. <sup>G</sup>T. Limanond, **D. Niemeier**, P. Mokhtarian (*In-press*) Specification of a tour-based shopping model for well-mixed neighborhoods, *Transportation*
- 9. **D. Niemeier** (*In-press*) The impact of incorporating spatial and temporal variability on running stabilized mobile emission inventories, *Atmospheric Environment*
- 10. B.L. Chua, Z. Li, D.T. McCormick, W.P. Shih, N.C. Tien, A.S. Wexler, D.A. Niemeier, B. Holmen (*Inpress*) A Unipolar Corona Discharge Microfabricated Ionizer Structure for Gases at Atmospheric Pressure and Composition, Technical Digest of 17th IEEE International Conference on Micro Electromechanical Systems, Maastricht, Netherlands, 25th-29th Jan, 2004, pp 261-264 (Acceptance Rate 34%)
- 11. <sup>G</sup>Morey, J., **Niemeier**, **D**. <sup>G</sup>T. Limanond (*In-press*) A stochastic framework for estimating unpaved road VMT for PM10 mobile emissions inventories, *ASCE Journal of Urban Planning*
- 12. <sup>G</sup>T. Limanond, **D. Niemeier** (*In-press*) The effect of land use on decisions of shopping tour generation: A case study of three traditional neighborhoods in WA, *Transportation*
- 13. **D. Niemeier**, C. Gonzalez (*In-press*) Breaking into the Guild Masters Club: Women Department Chairs in the AAU's, *National Women's Studies Association Journal*, Special Issue
- 14. Lee, A. G., D. Niemeier (*In-press*) Environmental Justice and Transportation, *Transport Dictionary*, Button and Nijkamp (*eds*), Pergamon
- 15. Gao, O. G., D. Niemeier (*In-press*) Mobile Emissions, *Transport Dictionary*, Button and Nijkamp (*eds*), Pergamon

### Published

- 16. <sup>G</sup>T. Held, D. Chang, **D. Niemeier** (2003) UCD 2001: an improve model to simulate pollutant dispersion from roadways, *Atmospheric Environment* 37: 5325-5336.
- 17. <sup>G</sup>Kear, T, **D. Niemeier** (2003) Sensitivity of Composite Exhaust Emissions Rates to Vehicle Population and Mileage Accrual Assumptions, *Transportation Research Record 1842*, Transportation Research Board, Washington DC: 73-82
- 18. <sup>G</sup>Lin, J. and **D. Niemeier** (2003) Estimating Regional Air Quality Vehicle Emission Inventories: Constructing Robust Driving Cycles, *Transportation Science*, 37(3): 330-346
- 19. **D. Niemeier**, <sup>G</sup>Y. Zheng, <sup>G</sup>T. Kear (2003) UCDrive: A new gridded mobile source emission inventory model, *Atmospheric Environment*, **38**(2): 305-319.
- 20. <sup>G</sup>Lin, J., **D. Niemeier**, Developing regional driving cycles using regional driving characteristics, *Transportation Research D*, **8**: 361-381.
- 21. <sup>G</sup>Foresman, E.L., Kleeman, <sup>G</sup>M.J., Kear, T.P., **D. Niemeier** (2003) PM10 Transportation Conformity Determinations: The Equivalent Emissions Method, *Transportation Research D*, 8:97-112.
- 22. <sup>G</sup>T. Limanond, **D. Niemeier** (2003) Accessibility and mode-destination choices: Exploring travel in three well-mixed neighborhoods in Puget Sound, WA, *Environment and Planning A*, 30: 219-238.

- 23. C. Gonzalez, **D. Niemeier**, A. Navrotsky (2003) The new generation of American scholars and the structure of the university, *Academe*, Jul-Aug:56-60.
- 24. GLin, J., **D. Niemeier** (2002) An exploratory analysis comparing a stochastic driving cycle to California's regulatory cycle, *Atmospheric Environment*, 36:5758-5770.
- 25. **Niemeier, D.** Spatial applicability of emission factors for modeling mobile emissions, (2002) *Environmental Science and Technology*, 36(4): 736-741
- 26. GHecht, H., **D. Niemeier**. (2002) Too Cautious? Avoiding risk in transportation project development, *Journal of Infrastructure Systems*, 8(1):1-9.
- 27. <sup>G</sup>Sugawara, S., **D. Niemeier** (2002). Using an emissions-optimized equilibrium traffic assignment to explore reductions in vehicle emissions, *Transportation Research Record 1815*, National Research Council, Wash DC: 29-37.
- 28. GHecht, H., D. Niemeier (2002) A Post-audit review: Previous audits of project development on the California state highway system, *Transportation Research Record 1817*, National Research Council, Wash, DC: 1-10.
- 29. **Niemeier. D**, J.M. Utts, <sup>G</sup>L. Fay. (2002). Using cluster analysis for optimal sampling of traffic count data: Air quality example, *ASCE Journal of Transportation Engineering*, 128(1): 97-102.
- 30. Eisinger, D., **D. Niemeier**, and M. J. Brady, (2002). Conformity: The New Force Behind SIP Deadlines, *EM* Feature Article, Air & Waste Management Association, January 2002
- 31. GHecht, H., **D. Niemeier** (2002) Transportation Project Efficiencies: The California Department of Transportation & California County Sales Tax Agencies, *Transportation Policy*, 9:347-356.
- 32. V.J. Davidson, J.M. Vance, **D. Niemeier** (2002) Women In Engineering Leadership Institute: Academic Leadership Development Plans, 12th International Conference of Women Engineers and Scientists, July, Ottawa, Canada
- 33. <sup>G</sup>Korve, M. and **D. Niemeier**. (2002). Addition of a bicycle phase to a major intersection: A benefit-cost analysis, *ASCE Journal of Transportation Engineering*, 128(1): 40-48.
- 34. <sup>G</sup>Kim, S., **D. Niemeier**. (2001) A weighted autoregressive model to improve mobile emissions estimates for locations with spatial dependence, *Transportation Science*, 35(4):413-424.
- 35. <sup>G</sup>Ito, D., **D. Niemeier**, G. Garry. (2001) Conformity: How VMT-speed distributions can affect mobile emissions inventory modeling, *Transportation, Special Issue (ed. D. Niemeier)*, 28(4): 409-425.
- 36. <sup>G</sup>Craig, J., B. Holmen, **D. Niemeier**, R. Shumway. Non-linear regression for modeling censored one-dimensional concentration profiles of fugitive dust plumes, *Journal of Agricultural, Biological, and Environmental Statistics*, 6(1):99-117.
- 37. Holmen, B., **D. Niemeier**, <sup>G</sup>Y. Meng (2001). Time series analysis of above-road particulate matter at the Caldecott Tunnel exit, *Journal of Air and Waste Management Association*, 51(4):601-615
- 38. <sup>G</sup>Hicks, J., **D. Niemeier** (2001). Incorporating Spatial Effects in Mobile Emissions Inventories, *Transportation Research Part D*, 6(3):153-177.
- 39. <sup>G</sup>Held, A.E., D. Chang, **D. Niemeier** (2001) Observations and Model Simulations of Carbon Monoxide Emission Factors from a California Highway, *Journal of Air and Waste Management Association*, 51(1):121-132
- 40. <sup>G</sup>Hendren, T., **D. Niemeier** (2001). State transportation expenditure reporting: Questions for the 21<sup>st</sup> century, *Public Works Management and Policy*, 5(3):179-198.
- 41. **Niemeier, D.**, Boulanger, R., Bayley, P., Muraleetharan, K., Schmid, S., Barros, A.(2001) Integration of Engineering Education and Research: Perspectives from the NSF Civil and Mechanical Systems 1998 CAREER Workshop, *Journal of Engineering Education*, April: 199-202
- 42. <sup>G</sup>Shaheen, S., **D. Niemeier** (2001). Linking technology and design to human factors: Minimizing vehicle constraints for the elderly, *Transportation Research*, *Part C*, 9(3):155-174.
- 43. <sup>G</sup>Yee, J. and **D. Niemeier** (2000). Activity duration analysis using the Puget Sound Panel Survey, *Transportation Research*, *Part A*, 34(8):607-624.
- 44. <sup>G</sup>Nanzetta, K., **D. Niemeier**, J. Utts. (2000) Changing speed-VMT distributions: The effects on emissions inventories and conformity, *Journal of Air and Waste Management Association*, 50(3):459-467.
- 45. Utts, J., **D. Niemeier**, <sup>G</sup>L. Ring. (2000) Statistical methods for estimating speed correction factors with confidence intervals for mobile source emissions models, *Transportation Research*, *Part D*, 5(2):103-120
- 46. <sup>G</sup>Meng, Y., **D. Niemeier**. (2000) A new screening measure to identify potential carbon monoxide hotspots,

- Journal of Air and Waste Management Association, 50(2):252-258
- 47. <sup>G</sup>Meng, Y. and **D. Niemeier** (2000). U.S. double-stack rail technology: Corollaries for China, *International Journal of Services Technology and Management, Special Issue on Commercialization of Technology in Transportation*, 1(2/3):224-235.
- 48. <sup>G</sup>Morey, J., <sup>G</sup>T. Limanond, and **D. Niemeier** (2000). Validity in chase car data: Issues of variability and implications for construction of emissions cycles, *Journal of Transportation Statistics*, 3(2):1-14
- 49. <sup>G</sup>Meng, Y., D. **Niemeier** (2000). A new statistical framework for estimating localized CO concentrations, *ASCE Journal of Transportation Engineering*, 126(5):426-434.
- 50. **Niemeier, D.**, <sup>G</sup>Lin, K., and J. Utts. (1999) Using observed traffic volumes to improve fine-grained regional emissions estimates, *Transportation Research*, *Part D*, 4(5): 313-332
- 51. <sup>G</sup>Franklin, J. and **D. Niemeier**. (1998) Discrete choice elasticities for the choice of elderly and disabled travelers between fixed-route transit and paratransit, *Transportation Research Record*, No. 1623, Transportation Research Board, Washington DC
- 52. <sup>G</sup>Meng, Y. and **D. Niemeier** (1998) Project level carbon monoxide "hot-spots" analysis for level of service D intersections, *Transportation Research Record*, No. 1641, Transportation Research Board, Wash DC
- 53. <sup>G</sup>Lin, K. and **D. Niemeier** (1998) Using multivariate multiple regression models to improve the link between air quality and travel demand models, *Transportation Research Part D*, 3(6): 375-387
- 54. Holmén, B. and **D. Niemeier**. (1998) Characterizing the effects of driver variability on real-world emissions, *Transportation Research Part D*, 3(2):117-128
- 55. <sup>G</sup>Yee, J. and **D. Niemeier** (1997) Travel trends using the Puget Sound Panel Survey: A generalized estimating equations approach, *Transportation Research Part B*, 32(1): 21-34
- 56. Niemeier, D. Accessibility: An evaluation using consumer welfare, Transportation, 24(4):377-396
- 57. Garage Turner, T. and **D. Niemeier** (1997) Journey to work travel patterns of men and women: New evidence, *Transportation*, 24(4): 397-419
- 58. Handy, S. and **D. Niemeier** (1997) Measuring accessibility: An exploration of issues and alternatives, *Environment and Planning A*, 29(7):1175-1194
- 59. **Niemeier, D**. (1997) Systems evaluation, Papers from NSF-ESF Workshop on Social Change and Sustainable Transportation, *Journal of Transport Geography*, 5(1):35
- 60. **Niemeier, D.**, J. Utts, K. Mack, A. Laub, and P. Rock (1997). Changing Missions, *Invited Paper*, 1997 Frontiers in Education Conference, Pittsburgh, PA.
- 61. <sup>G</sup>Shafizadeh, K. and **D. Niemeier** (1997) Bicycle journey to work: Travel behavior and spatial attributes, *Transportation Research Record*, No. 1578, Transportation Research Board, Washington DC.
- 62. **Niemeier, D**. (1996) An engineers perspective: Comments on "Minority Women and Technology," Invited Commentary, *Technology Studies*, 3(1):127-130
- 63. **Niemeier, D.** (1996). "Transportation infrastructure funding: Linking women's travel needs to local funding priorities," *Invited Paper*, Proceedings, Second National Conference on Women's Travel Issues, Baltimore, MD.
- 64. **Niemeier, D.** and J. Morita (1996). Duration of trip-making activities by men and women: A survival analysis, *Transportation*, 23(4):353-371
- 65. **Niemeier, D.**, <sup>G</sup>T. Reed, S. Rutherford and P. Morin. (1995) Statewide programming: Implementing transportation policy objectives, *ASCE Journal of Infrastructure Systems*, 2(1):30-40
- 66. **Niemeier, D**. A longitudinal analysis of bicycle count variability: Results and modeling implications, *ASCE Journal of Transportation Engineering*, 122(3):200-206
- 67. **Niemeier, D.**, Z. Zabinsky, Z. Zeng, and S. Rutherford (1995). Optimization models for transportation project programming process, *ASCE Journal of Transportation Engineering*, 121(1):14-26
- 68. **Niemeier, D**. and S. Rutherford (1994). Non-motorized transportation, *NPTS: Travel Mode Special Reports*, U.S. Department of Transportation, Federal Highway Administration, Office of Highway Information Management, Washington, D.C
- 69. **Niemeier, D**. and K. Beard (1993). GIS and Transportation Planning: A Case Study, *Computers, Environment, and Urban Systems*, 17:31-43

## B. Conference Proceedings (Reviewed Papers)

70. B.L. Chua, Z. Li, D.T. McCormick, W.P. Shih, N.C. Tien, A.S. Wexler, D.A. Niemeier, B. Holmen (Oct

- 2004) "Collection of Non-Gas Phase Nanoparticles by Microfabricated Electrostatic Precipitator", Accepted for CANEUS 2004 Conference on Micro-Nano-Technologies for Aerospace Applications, Monterey CA, Oct 31st Nov 5th, 2004.
- 71. Kear, T<sup>G</sup>., **D. Niemeier** (2004), Diesel particulate matter: Risk management strategies for the transportation planning process, Conference Proceedings, 10<sup>th</sup> International Conference on Urban Transport and the Environment, Dresden Germany
- 72. Shafizadeh<sup>G</sup>, K., **D. Niemeier** (2004), Analysis of gross polluter cutpoints based on in-use vehicle inspection and maintenance test data in California, Conference Proceedings, 10<sup>th</sup> International Conference on Urban Transport and the Environment, Dresden Germany
- 73. Eisinger, D., M.K. Nanzetta<sup>G</sup>, T. Kear<sup>G</sup>, **D. Niemeier**, R.M. O'Loughlin, M.J. Brady (2003), Particulate Matter and Transportation Projects: An PM10 Analysis Protocol, Paper 70067, *Conference Proceedings*, Energy, Economic, and Global Challenges: Environment in the Balance, 96th Annual Meeting, Air & Waste Management Association, San Diego
- 74. <sup>G</sup>Gao, O., **D. Niemeier** (2001) Changes in the California Motor Vehicle Emissions Inventory Models: EMFAC7g to EMFAC2000, Conference Proceedings, Air and Waste Management Association, 2001 Annual Conference, Orlando, Fl.
- 75. <sup>G</sup>Lin, J., **D. Niemeier** (2001) Development of new driving cycles: Assessing regional driving characteristics, N400, Conference Proceedings, Air and Waste Management Association, 2001 Annual Conference, Orlando, Fl.
- 76. **Niemeier, D.**, Nanzetta, K. (2000). Experimental evaluation of mobile emissions estimates: Do speed correction factors account for regional differences in emissions? Conference Proceedings, Air and Waste Management Association, Annual Conference, Salt Lake City, UT
- 77. **Niemeier, D**. *et al* (1999) Vehicle ownership patterns using the 1990 NPTS, *Invited Paper*, Conference Proceedings, Conference on Personal Travel: The long and the short of it, Washington, DC.
- 78. Zabinsky, Z. and **D. Niemeier** (1997). Linear programming approach to the capital rationing problem in transportation, *Invited Paper*, Conference Proceedings, INFORMS, Dallas, TX.

## C. BOOK AND BOOK CHAPTERS

- 79. Committee to Review the Bureau of Transportation Statistics Survey Program, (2004) Measuring Personal Travel and Goods Movement: A Review of the Bureau of Transportation Statistics' Surveys, National Research Council, National Academy Press: Washington DC
- 80. **Niemeier, D.** (*In-press*) Mobile Source Emissions: An Overview of the Regulatory and Modeling Frameworks, *Transportation Engineering Handbook: Planning Methods and Applications* (ed. K. Goulias), CRC Press
- 81. B. Holmén and **D. Niemeier** (*In-press*) *Issues in Transportation-Air Quality Modeling*, The Pergamon/Elsevier Science Handbooks in Transport, Handbook 4: Transport and the Environment, (ed. D. Hensher, K. Button), Pergamon/Elsevier Science
- 82. Utts, J. and **D. Niemeier** (1998). Multinomial prediction intervals for micro-scale highway emissions, (ed. S.Geisser), Institute for Mathematics and Applications, Statistics in the health sciences: diagnostics and prediction, IMA Volume 114, Springer.

# **D. SUBMITTED PEER-REVIEWED PUBLICATIONS (**<sup>G</sup> *Graduate Student/PostDoc*)

- **D. Niemeier**, V. Smith (*Submitted Nov 2004*), Building Careers, Transforming Institutions: Underrepresented Women and Minorities, Leadership Opportunities, and Inter-institutional Networking, *Journal of Women and Minorities in Science and Engineering*
- <sup>G</sup>Gao, O., **D. Niemeier** (*Submitted Nov 2004*) Functional Data Analysis of Diurnal Ozone and NOx Cycles in Southern California, *Environmental Science and Technology*
- <sup>G</sup>Gao, O., **D. Niemeier** (*Submitted Nov 2004*) The Impact of Rush Hour on the Ozone Weekend Effect, *Transportation Research Part D*
- <sup>G</sup>Sogutlugil, Mimi (*Submitted Nov 2004*), Photochemistry effects of using highly resolved average speeds for emissions, *Atmospheric Environment*
- <sup>G</sup>Sogutlugil, Mimi (*Submitted Nov 2004*) Civil and Environmental Engineering), Examining the effects of intrahour and lane variability in average speeds on estimated emissions and air quality, *Transportation Research Part D*

- <sup>G</sup>Hendren, P., **D. Niemeier** (*In-press*) Evaluating the effectiveness of state department of transportation investment decisions: linking performance measures to resource allocation, *Journal of Infrastructure Systems*
- <sup>G</sup>Kear, T, **D. Niemeier** (*Submitted June 2004*) Measuring Progress Toward Air Quality Standards: What Can Updated Emissions Inventories Tell Us?, *Environmental Science and Technology*
- <sup>G</sup>Shafizadeh, K., **D. A. Niemeier**, P. L. Mokhtarian, I. Salomon (*Submitted May 2004*) The Costs and Benefits of Home-Based Telecommuting: A Monte Carlo Simulation Model Incorporating Telecommuter, Employer, and Public Sector Perspectives, *Journal of Infrastructure Systems*
- <sup>G</sup>Khorashadi, A., D. Niemeier, V. Shankar, F. Mannering (*Submitted Mar 2004*) Differences in rural and urban driver-injury severities in accidents involving large-trucks, *Journal of Accident Analysis and Prevention*
- Eisinger, D., **D. Niemeier**, T. Stoeckenius, T. Kear, M. Brady, A. Pollack, J. Long (*Submitted May 2004*) A robust field study design: Data collection and management for mobile emissions driving cycles, *ASCE Transportation Engineering*
- Torres, R., D. Niemeier, J. Momsen (*Submitted Nov 2003*) Cuba's Farmers Markets: Agricultural Organization, Transportation Access, and Performance, *Special Issue on the Caribbean, Southeastern Geographer*

### E. CONFERENCE PRESENTATIONS AND INVITED TALKS

- Gao, O. and **D. Niemeier** (June 2004) Using Weigh-In-Motion Traffic Data in Mobile Emissions
  Estimation and Air Quality Studies, North American Travel Monitoring Exhibition & Conference:
  Obtaining and Using Traffic Monitoring Data for Improving System Performance. Loews Coronado Bay, San Diego, California, June 27-30, 2004 (NATMEC 2004)
  - **Niemeier, D.** (Feb 2004), *Invited Speaker*, Interdisciplinary Research and Education, NRC Workshop on Research Opportunities in GeoEngineering, Beckman Center, Irvine, CA
  - Zhang, K.M., A. S. Wexler, **D. A. Niemeier**, Y. Zhu, W.C. Hinds, C. Sioutas (2004) On-road size-resolved ultrafine particulate emission factors for diesel and gasoline-powered vehicles, 23rd Annual Conference of the American Association for Aerosol Research, Atlanta, GA
- Niemeier, D. (October 2003), *Invited Panelist*, University of Michigan Women in Science and Engineering Leadership Retreat, Panel on Academic Leadership, Ypsilanti, MI
  - **Niemeier**, **D.** (November, 2003), *Invited Speaker*, NSF Women's Engineering Leadership Conference, Dinner Speaker, Salt Lake City, UT
  - **Niemeier, D.** (September 2003), *Invited Panelist*, Workshop for the Advancement and Retention of Underrepresented and Minority Engineering Educators, Dean and Department Chair Panel Discussion, National Science Foundation
  - Gao, O., **D. Niemeier** (2004, *abstract reviewed*) Using WIM data to study heavy-duty truck traffic patterns for emission inventory development, The North American Travel Monitoring Exhibition and Conference, 2004, Transportation Research Board, San Diego, CA.
  - Niemeier, D. (April 2003), *Invited Lecture*, Women in Science Lecture, Syracuse University
  - Gonzalez, C., **D. Niemeier**, K. Scow, January 2003, The Future of the City of Intellect: From the Culture of Research to a Culture of Freedom: Examples from the Sciences, 89th Meeting of the Association of American Colleges and Universities: The Courage to Question: Liberal Education in the 21st Century, Seattle, WA
- 2002 **Niemeier, D**. (April 2002). Mobile Emissions: From Science to Apoplexy, *Invited Talk*, Northwestern University
  - Niemeier, D. (April 2002). Department Chair Panel, *Invited*, University of Texas, Austin
  - Eisinger, D., **D. Niemeier**, T. Kear (2002, *abstract review*) The California Department of Transportation/Air Resources Board Modeling Program (CAMP): New Research to Improve Speed Correction Factors and Mobile Source Emissions Modeling, EPA Conference: Emission Inventories Partnering for the Future, April, Atlanta, Georgia
- Niemeier, D. (2001). A Vision for Change, *Invited Participant*, A socratic discussion on university reform, Kellogg Foundation, Atlanta GA
  - <sup>G</sup>Lam, T., **D. Niemeier** (2001). The land-use transportation problem: Considering mobile emissions, 36<sup>th</sup> Annual Conference of the Canadian Transportation Research Forum, Vancouver, BC
  - **Niemeier, D.** (2001). Fostering diverse leadership, Panel Moderator, 2001 AAHE Conference on Faculty Roles and Rewards, *The Changing Professoriate: New Technologies, New Generation*, Orlando, FL

- **Niemeier, D.** (2001) Refining the spatial and temporal inputs from travel demand models, The Data Analysis Conference for the 1997 Southern California Ozone Study-North American Research Strategy for Tropospheric Ozone, California Air Resources Board, Diamond Bar, CA
- <sup>G</sup>Morey, J., **D. Niemeier** (2001, *abstract review*), Estimating travel activity on unpaved roads for PM10 conformity, International Emission Inventory Conference: One Atmosphere, One Inventory, Many Challenges, U.S. EPA, Denver, CO.
- 1999 **Niemeier, D**. (1999). Highway Economic Recovery System, Vetting Workshop, *Invited Participant*, Carnegie-Mellon University, Pittsburgh.
  - **Niemeier, D.** (1999). Statistical variability in mobile emissions estimation, 1999 Joint Statistical Meetings, Baltimore.
  - Hendren, T., D. Niemeier (1999). State Highway Expenditure Reporting: What Questions Should We Ask for the 21st Century, Transportation Research Board, 78th Annual Meeting, Washington, DC.
- Niemeier, D. (1998). Welfare to work in real-time, *Invited Presenter*, *Getting Welfare Recipients to Work:*Transportation and Welfare Reform, Conference, Dept. of Urban Planning, University of California, Los Angeles.
  - <sup>G</sup>Franklin, J., **D. Niemeier** (1998). Discrete choice elasticities for the choice of elderly and disabled travelers between fixed-route transit and paratransit, Transportation Research Board, 77th Annual Meeting, Washington, DC.
  - <sup>G</sup>Meng, Y., **D. Niemeier** (1998). Project level carbon monoxide "hot-spots" analysis for level of service D intersections, Transportation Research Board, 77th Annual Meeting, Washington, DC.
- 1997 **Niemeier, D** (1997), Workshop Chair, *Nationwide Personal Transportation Survey*, 1<sup>st</sup> Symposium, Bethesda, MD. October.
  - Shafizadeh, K., **D. Niemeier**, P. Mokhtarian, and I. Salomon, (1997). Telecommuting commuting benefits and costs: A literature review and analysis framework, 8<sup>th</sup> Meeting of the International Association of Travel Behavior Research, Austin, TX.
  - **Niemeier, D.**, <sup>G</sup>M. Bagley, and J. Nelson (1997). Value of travel time: Accounting for household responsibility, 8<sup>th</sup> Meeting of the International Association of Travel Behavior Research, Austin, TX.
- 1996 **Niemeier, D**. (1996). *Transportation Investment Strategy under ISTEA*, Transportation Research Board, 75th Annual Meeting, Washington, DC.
  - <sup>G</sup>Shafizadeh, K., **D. Niemeier** (1996). Bicycle journey to work: Travel behavior characteristics and spatial attributes, Annual Meeting, *Transportation Research Board*, Washington DC.
- Niemeier, D. (1995). Invited Participant, Workshop on the Measurement of Range, Scope and Extent of the Impacts of Congestion Pricing, U.S. DOT, FHWA, Washington, DC.
  - **Niemeier**, **D**. (1995). Invited Participant, Accessibility as Planning Goal and Performance Measure, ACSP, Chicago, IL.
  - **Niemeier**, **D**. (1995). Session Moderator, Travel Demand Models, 5th Annual National Transportation Planning Methods Application Conference, Seattle, WA.
  - **Niemeier**, **D.** (1995). Spatial analysis for neighborhoods on rate of transit usage, Transportation Research Board, 74th Annual Meeting, Washington, DC.
  - **Niemeier**, **D.** (1995). Recent data collection and implications for modeling, Transportation Research Board, 74th Annual Meeting, Washington, DC.
- 1994 **Niemeier, D**. (1994). Invited Participant, Chapter Preparation on Changing Demographics and Transportation Implications, Biennial Report to Congress on the Infrastructure, Tempe, AZ.
  - **Niemeier, D.** (1994). Transportation Planning in Context, Nevada Chapter of the American Planning Association, 1994 Annual Conference: Planning with Design, Los Vegas, Nv.
  - **Niemeier, D.**, F. Mannering, (1994). Interrelationships between workplace location and mode choice, 73rd Annual Meeting, Transportation Research Board, Washington, DC.
  - **Niemeier**, **D.**, J. Morita (1994). Duration of trip-making activities by men and women: A survival analysis, 73rd Annual Meeting, Transportation Research Board, Washington, DC.
  - Rutherford, S., **D. Niemeier**, C. Kooperberg (1994). Daily travel patterns and electric vehicles: An exploratory data analysis, 73rd Annual Meeting, Transportation Research Board, Washington, DC.
  - <sup>G</sup>Badgett, S., **D. Niemeier**, S. Rutherford (1994). Case studies: Employee commuter cycling in Seattle, 73rd Annual Meeting, Transportation Research Board, Washington, DC.

- Niemeier, D., S. Rutherford, D. Whitehouse (1993). Project programming: Implementing statewide transportation policy objectives, 73rd Annual Meeting, Transportation Research Board, Committee on Transportation Programming, Planning and Systems Evaluation, Washington, DC.
- Niemeier, D., S. Rutherford, <sup>G</sup>J. Strauss (1992). Analysis of participants in TDM alternatives at the University of Washington, 72nd Annual Meeting, Transportation Research Board, Wash.DC.
- 1991 **Niemeier, D**. (1991). GIS and Transportation Planning, Instructor, Lincoln Land Institute, Special Conference on Innovations in GIS, Boston, MA.

### F. TECHNICAL REPORTS

- 2003 Gao, O., **D. Niemeier** (2003) Hourly truck traffic profiles and emissions: Southern California weigh-inmotion data, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA., aqp.engr.ucdavis.edu
  - Eisinger, D., K. Nanzetta, T. Kear, R. O'Loughlin, M. Brady, **D.** Niemeier (2003) Particulate Matter and Transportation Projects, An Analysis Protocol, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA., aqp.engr.ucdavis.edu
  - Sogutlugil, Mimi, **D. Niemeier** (2003) Examining the speed-VMT distributions for emissions inventories, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA., aqp.engr.ucdavis.edu
- 2002 Holmen, B., D. Niemeier, GM. Nanzetta, S. Bergen (2002) The Physical and Chemical Characterization of Nanoparticle Particulate Matter Emissions from Gasoline and Diesel On-Road Motor Vehicles, Phase 1 Scoping Study, Draft Final, Prepared for the California Air Resources Board, Research Division, Sacramento, CA
  - <sup>G</sup>Lam, T., **D. Niemeier** (2002) Review of statewide transportation planning models, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA. aqp.engr.ucdavis.edu
  - <sup>G</sup>Lam, T., <sup>G</sup>K. Jierranaitanakit, **D. Niemeier** (2002) Estimation of Hourly Allocation Factors for the Central California Ozone Study Using State-Wide Model Data and Real Time Traffic Data, prepared for the California Air Resources Board, CalEPA, Sacramento, CA
  - <sup>G</sup>J. Morey, **Niemeier, D.** (2002). Using GIS to Estimate Statewide Vehicle Activity and Roadway Mileage for Unpaved Roads in California, prepared for the California Air Resources Board, CalEPA, Sacramento, CA
- 2001 <sup>G</sup>Zheng, Y., **D. Niemeier** (2001) A new grid-based mobile sources emissions inventory model, Draft Report, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA. aqp.engr.ucdavis.edu
  - <sup>G</sup>Gao, O., **D. Niemeier** (2001) Mobile Emissions Inventories: EMFAC7g and EMFAC2000 comparisons by air basin, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA. aqp.engr.ucdavis.edu
  - Eisenger, D., **D. Niemeier** (2001) California conformity timelines: EMFAC 2000 approval considerations, Draft Report, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA. aqp.engr.ucdavis.edu
- Niemeier, D., <sup>G</sup>M. Sumpter (2000). Transportation needs of Sacramento County welfare recipients, UCD-ITS-RR-00-2, Final Report, prepared for the Sacramento County Department of Human Assistance, Institute of Transportation Studies, Davis, CA.
  - <sup>G</sup>J. Morey, <sup>G</sup>T. Limanond, **Niemeier, D.** (2000). Data Collection for Driving Cycle Development: Evaluation of Data Collection Protocols, UCD-ITS-RR-00-3, Final Report, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA.
  - **Niemeier, D.**, <sup>G</sup>Ito, D. (2000). Transportation air quality conformity modeling in Sacramento and San Joaquin Valley, Final Report, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA.
- Niemeier, D., <sup>G</sup>J. Hicks, <sup>G</sup>M. Korve (1999). Estimation of allocation factors for disaggregation of travel demand model volumes to hourly volumes for highways in the South Coast Air Basin: Southern California Ozone Study, UCD-ITS-RR-13, prepared for the California Air Resources Board, Institute for Transportation Studies, Davis, CA.
  - **Niemeier, D**. <sup>G</sup>J. Morey , <sup>G</sup>T. Limanond, K. Lakshminarayanan , J. Franklin (1999). An exploratory study: A new methodology for estimating unpaved road miles and vehicle activity on unpaved roads, UCD-ITS-RR-99-2, Final Report, prepared for the California Air Resources Board, Institute of

- Transportation Studies, Davis, CA.
- **Niemeier, D**. <sup>G</sup>T. Limanond, K. Lakshminarayanan, J. Morey, J. Franklin (1999). Using GIS to estimate unpaved road miles and vehicle activity on unpaved roads, UCD-ITS-RR-99-3, Final Report, prepared for the California Air Resources Board, Institute of Transportation Studies, Davis, CA.
- Niemeier, D., J. Utts, <sup>G</sup>K. Nanzetta, <sup>G</sup>L. Ring (1998). Speed correction curves: Scoping Study, UCD-ITS-RR-98-12, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA.
  - <sup>G</sup>Reed, T., <sup>G</sup>J. Franklin, **D. Niemeier**, T. Rufulo (1998), Benefit-cost analysis of multimodal projects for state-wide prioritization of capacity investments, UCD-ITS-RR-98-3, Institute of Transportation Studies, University of California, Davis, CA
  - Kear, T., <sup>G</sup>K. Dougherty, K. Lee, D. Eisinger, **D. Niemeier** (1998), Transportation project-level carbon monoxide protocol user workbook, UCD-ITS-RR-98-9, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA.
  - <sup>G</sup>Franklin, J., **D. Niemeier** (1998), The prioritization of mobility improvements using a multicritiera prioritization algorithm, UCD-ITS-RR-98-4, Institute of Transportation Studies, University of California, Davis, CA
  - <sup>G</sup>Shafizadeh, K., **D. Niemeier**, P. Mokhtarian, I. Saloman (1998). The Costs and Benefits of Telecommuting: An evaluation of macro-scale literature, California PATH Working Paper, UCB-ITS-PWP-98-5, Institute of Transportation Studies, University of California, Berkeley.
- 1997 <sup>G</sup>Yu, M., **D. Niemeier** (1997). Modeling carbon monoxide concentrations at level of service D intersections, UCD-ITS-RR-98-7, prepared for the California Department of Transportation, *UC Davis-Caltrans AQ Project Report Series*, Davis, CA.
  - <sup>G</sup>Lin, K.S., **D. Niemeier** (1997). Exploratory analysis: A method to improve the link between travel demand models and DTIM2, Final Report, funded by California Air Resources Board, Institute of Transportation Studies, UCD-ITS-RR-95-10, Davis, CA.
- 1996 <sup>G</sup>Yee, J., **D. Niemeier** (1996). Overview of travel trends in the Puget Sound Panel Data, 1989-1993, Task E, Volume 1, Project Battelle 94-16, FHWA, HPM-40, Washington, DC.
  - <sup>G</sup>Yee, J., **D. Niemeier** (1996). Advantages and disadvantages: Longitudinal vs. repeated cross-section surveys, Project Battelle 94-16, FHWA, HPM-40, Washington, DC.
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- Niemeier, D., J. Myers (1995). Categories for Oregon Department of Transportation modernization project evaluation, Draft, Oregon Transportation Department, Salem, OR.
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- Niemeier, D., S. Rutherford (1992). Project prioritization: A new evaluation process for statewide project programming, Phase 1, Technical Report, Washington State Transportation Department, June, Olympia, Washington.

### **UNDERGRADUATE RESEARCHERS**

Kable, Jason (Civil Engineering, 2005), Research Period: 2003-Present.

Osborne, Adrienne (Civil Engineering, 2004), Research Period: 2000-Present.

Duong, Timothy (Mechanical Engineering, 2004), Research Period: 2001-2003.

Duong, T. (2002) The effects of a warning light on air pollution, Explore the Possibilities: The 13<sup>th</sup> Annual Undergraduate Research Conference, University of California, Davis

Whitten, Danielle (International Policy, 2002), Research Period: 1998-2002

Witten, D. (2002) The changing role of the California Transportation Commission, Explore the Possibilities: The 13<sup>th</sup> Annual Undergraduate Research Conference, University of California, Davis

Thomas, Megan, (BSCE, 2000), Research Period: 1995-2000.

Thomas, M. (1999). A Method for Deriving Background Carbon Monoxide Concentrations for Sacramento

County, (adv. D. Niemeier), Proceedings 12<sup>th</sup> National Conference on Undergraduate Research, Vol. 11, Rochester, NY.

Montez, Russell, (BSCE, 1999), Research Period: 1996-1999.

Montez, R. (1999). Gap Analysis for Bicycle Flow in Mixed Traffic, (adv. D. Niemeier), Proceedings 12<sup>th</sup> National Conference on Undergraduate Research, Vol. 11, Rochester, NY.

Montez, R. (1999). Bicycle Traffic in Mixed-Use Roundabout Intersections, Society of Hispanic Professional Engineers, National Technical and Career Conference, Los Angeles, CA. Feb.

Flourney, Marlon, (BS-Env. Policy, 1999), Research Period: 1998-1999.

Flourney, M. (1999). Cost-Benefit Analysis for Electric Vehicles, (adv. D. Niemeier), 10<sup>th</sup> Annual Conference on Undergraduate Research, UC Davis.

Van Wert, Chris (BSME, 1999), Research Period: 1996-1998.

Van Wert, C. (1998). Real-time emissions from a diesel bus, 9<sup>th</sup> Annual Conference on Undergraduate Research, UC Davis.

Korve, Matt (BSCE, 1997), Research Period: 1996-97.

Korve, M. and D. Niemeier (1997). Cost-benefit analysis of a separated bicycle phase, *Forthcoming ASCE Journal of Transportation Engineering*.

Hulse, Lisa (BSCE, 1995), Research Period: 1994-95

Hulse, L. and K. Shafizadeh (1996). Bicycle Travel to Work Patterns, (adv. D.Niemeier), Proceedings 10th National Conference on Undergraduate Research, Vol. 1, Asheville, NC.

Shafizadeh, Kevan (BSCE, 1995), Research Period: 1994-96.

Hulse, L. and K. Shafizadeh (1996). Bicycle Travel to Work Patterns, (adv. D.Niemeier), Proceedings 10th National Conference on Undergraduate Research, Vol. 1, Asheville, NC.

# **MASTERS STUDENTS (MAJOR ADVISOR)**

Present Elizabeth Yura (Civil and Environmental Engineering)
Bryan Jungers (Civil and Environmental Engineering)
Justin Kable (Civil and Environmental Engineering)

2004 Rosenberg, Sandra (Transportation Technology and Policy), Thesis: *Measurement of Silt Loading and PM10 Emissions Factors for Paved Roads in the San Joaquin Valley* 

Lee, Andrew (Civil and Environmental Engineering), Thesis: Environmental Justice and Transportation: Assessments Using Statistical Models and GIS

Foresman, Erin (MS, Ecology, 2001)

2000 Ito, Doug (MS, 2000), Transportation Technology and Policy, Thesis: *Transportation Air Quality Conformity Modeling Trip-Based Speed-VMT Distributions: Assessment and Recommendations*Sumpter, Matt (MS, 2000) Transportation Technology and Policy, Thesis: *Transportation Needs of Sacramento County Welfare Recipients* 

1999 Korve, Matt (MSCE, 1999), Civil Engineering, Thesis: Analysis of Variability of Diurnal Traffic Patterns by Day of Week and the Effects on Air Quality.

Hicks, Jaime, (MSCE, 1999), Civil Engineering, Thesis: *Disaggregating period-based travel demand model volumes into hourly volumes: Both matched and unmatched links.* 

Sugawara, Satoshi (MSCE, 1998), Civil Engineering, Thesis: *Theoretical development of an emission-optimized trip assignment model: an exploratory study*.

Shafizadeh, Kevan (MSCE, 1998), Civil Engineering, Thesis: *A cost-benefit analysis of home-based telecommuting*, (Co-Advise: P. Mokhtarian)

Lakshiman, Kishore (MSCE, 1998), Civil Engineering, Plan II Report: *Contours of intra-neighborhood accessibility*.

Brown, Shane (MSCE, 1998), Civil Engineering, Thesis: Estimating the cost of wetlands mitigation for transportation project development.

Franklin, Joel (MSCE, 1998), Civil Engineering, Thesis: *Proposed modifications for generalizing the TOPSIS Multicriteria method of prioritizing multi-modal mobility improvements* 

1995 Stokes, JD (MSCE, 1995), Civil Engineering, Thesis: *Implementing MIS: A New Method of Project Programming*.

## **DOCTORAL STUDENTS (MAJOR ADVISOR)**

Current Bai, Song (Candidate, Civil and Environmental Engineering)

Kear, Thomas (Candidate, Civil and Environmental Engineering)

Dai, Zhen (Candidate, Civil and Environmental Engineering)

Talen, Gil (Transportation Technology and Policy)

Liu, David (Civil and Environmental Engineering)

Peng, Wu (Civil and Environmental Engineering)

Jeroen Van Houtte (Civil and Environmental Engineering)

Julia Silvus (Geography)

Carrie Ashendel (Transportation Technology and Policy)

- Gao, Oliver (July 2004, Civil and Environmental Engineering), Temporal and Spatial Statistical
  Analysis of Heavy-Duty Diesel Truck Traffic and Ozone/NOx Dynamics in Southern California
  Sogutlugil, Mimi (July 2004, Civil and Environmental Engineering), Examining the effects of intra-hour
  and lane variability in average speeds on estimated emissions and air quality
  - Kiettipong Jierranaitanakit (July 2004, Civil and Environmental Engineering), An Application of Logit Modeling for The Classification of Network Links for Hourly Traffic Patterns in Emission Inventories
  - Nanzetta, Kathy (Ph.D, Civil and Environmental Engineering, 2004) Ultrafine particle number concentration measurements of a Northern California freeway and the relationships with meteorology and traffic volumes, University Of California, Davis: 445 pp.
- Hendren, Patricia, G. (Ph.D., TTP, 2003) Evaluating the link between resource allocation decisions and transportation performance measures: 17 years of spending on roads, University of California, Davis: 436pp., Current: Cambridge Systematics, Inc. Wash DC
  - Khorashadi, Ahmad (Ph.D., CEE, 2003) *Analysis of driver injury severity logit models of truck involvement/truck causation*, University of California, Davis: 236pp.
  - Morey, Jennifer (Ph.D, Ecology, 2003) *Refining PM10 emissions inventories in CA: New methods for estimating vehicle activity on unpaved roads*, University of California, Davis: 185pp., Current: Independent Consultant, Seattle, WA
  - Zheng, Yi (Ph.D, CEE, 2003) *A new grid-based mobile source emission inventory model*, University of California, Davis: 226pp., Current: Student, Haas School of Business, UCB
- Lin, Jane (Ph.D., CEE, 2002) *A markov process approach to driving cycle development*, University of California, Davis: 215pp., Current: Asst. Professor, University of Illinois, Chicago (Aug 2003-Present)
- 2001 Limamond, Thirayroot (Aug 2001, Civil and Environmental Engineering), *An Integrated Travel Model* for Neighborhood Shopping, Unpublished dissertation, University of California, Davis
  - Hecht, Harry (June 2001, Civil and Environmental Engineering), *Development of major transportation projects in California*, University of California, Davis, Current: Independent Consultant
- Meng, Yu (1998, Civil and Environmental Engineering), *A New Statistical Model for Modeling CO* "*Hotspots*", University of California, Davis, Current: Morgan Stanley
- Lin, Kuo-shian (1997, Civil and Environmental Engineering), *Improving Transportation Emissions*Modeling by Integrating Ground Counts with Travel Demand Model Forecasts, University of California, Davis, Current: Deputy Chief, Transportation Planning Division, Ministry of Transportation and Communications, Taipei, Taiwan.

## D. POST-DOCTORAL RESEARCHERS (MAJOR ADVISOR)

Shafizadeh, Kevan, 2002-2004, (Ph.D., Civil Engineering), Assistant Professor, Cal State University, Sacramento Chen, Cynthia, 2002-2003, (Ph.D., Civil Engineering), Assistant Professor, City University, New York Lam, Terence, 2000-2002 (Ph.D., Civil Engineering), Sr. Researcher, US Government Accounting Office Kim, Sung, 1998-1999 (Ph.D., Statistics), Assistant Professor, University of Georgia Meng. Yu, 1998-1999 (Ph.D., Civil Engineering), Sr. Analyst, Morgan Stanley, NY

### SERVICE

## A. DEPARTMENT

2001-Present Department Chair 2000-01 Vice-Chair

	W. L. C. C. L. D. L. C. L.
	Undergraduate Curriculum Revisions Committee
1000 00	Chair, Building Committee
1999-00	Vice-Chair
	Chair, Building Committee
	Undergraduate Curriculum Revisions Committee
1000.00	Management Technology Program, Ad-Hoc Committee
1998-99	Building Committee
	Undergraduate Curriculum Revisions Committee
	Undergraduate Advisor
1997-98	Building Committee
	Computer Committee
	Undergraduate Curriculum Revisions Committee
	Faculty Search Committee
	Undergraduate Advisor
1996-97	Building Committee
	Computer Committee
	Undergraduate Curriculum Revisions Committee
	Faculty Search Committee
1995-96	Academic Senate Representative
	Computer Committee
1994-95	Academic Senate Representative, Alternate
B. College	
2000-01	College Executive Committee
1999-00	Advisory Committee on Recruitment
1998-99	Committee on Undergraduate Study
1997-98	Chair, Committee on Student Development
	Committee on Undergraduate Study
1996-97	Chair, Committee on Student Development
C. CAMPUS	
C. CAMPI	
2002-03	Chair, Special Senate Review Committee, UC Davis Transition to Division 1 Athletics
	University Mediator, Mediation Services, Human Resources
	Preliminary Investigating Officer, Provost Office, Academic Personnel
2001.02	Sub-Committee: Academic Planning and Development, Graduate Council
2001-02	Committee on Academic Planning and Budget Review
	University Mediator, Mediation Services, Human Resources
	Committee to develop material for new chairs, Vice Provost for Academic Affairs
2000 01	Sub-Committee: Academic Planning and Development, Graduate Council
2000-01	Committee on Academic Planning and Budget Review
	Provost Academic Advisory Council
	Sub-Committee: Academic Planning and Development, Graduate Council
	Arbitration Hearing (Chair), Human Resources and Risk Management
	University Mediator, Mediation Services, Human Resources
	Consortium for Women and Research Advisory Board
	UC Davis Washington Center Advisory Committee
1000 00	Atmospheric Science Graduate Group, Executive Committee
1999-00	Provost Academic Advisory Council
	Provost Academic Planning Council
	Chancellor's and Provost's Task Force on Faculty Recruitment
	Sub-Committee: Academic Planning and Development, Graduate Council
	Arbitration Hearing (Chair), Human Resources and Risk Management
	UC Davis Washington Center Advisory Committee
	Graduate Council Program Review, Materials Science

Consortium for Women and Research Advisory Board

1998-99 Recruitment Committee, Vice Provost, Undergraduate Studies

Provost Academic Advisory Council

Provost Academic Planning Council

Chair, Consortium for Women and Research Advisory Board

Committee on Admissions and Enrollment

UC Davis Washington Center Advisory Committee

Sub-Committee, Humanities and Environmental Sciences, Env. Initiative

Panelist, Chancellor's Fall Conference, Topic: Curriculum and Outreach

Graduate Council Review, Materials Science

### D. PROFESSIONAL

2003-04 External Reviewer, Graduate Program Review, Oregon State University, Dept. of Civil and Environmental Engineering

Member, ASCE President's Committee on Faculty Professional Engineering Licensure

Peer Reviewer, On-site Review of the Mickey Leland National Urban Air Toxics Research Center,

U.S. Environmental Protection Agency, Office of Research and Development, Sept. 17-19.

Member, Committee for Review of Travel Demand Forecasting Modeling by the Metropolitan

Washington Council of Governments, Transportation Research Board, National Research Council, National Academy of Science

Member, ASCE Committee on Academic Prerequisites for Professional Practice

Member, NSF Review Panel, Director's Award for Distinguished Teaching Scholars (DTS)

ASCE Journal of Infrastructure Systems, Journal Manuscript Reviews

Transportation, Journal Manuscript Reviews

Transportation Research B/D, Journal Manuscript Reviews

Atmospheric Environment, Journal Manuscript Reviews

2002-03 Member, Committee to Review FHWA BTS Data, National Research Council, National Academy of Science

Member, Committee for Review of Travel Demand Forecasting Modeling by the Metropolitan Washington Council of Governments, Transportation Research Board, National Research Council, National Academy of Science

External Reviewer, College of Engineering, Dept of Civil Engineering, University of Connecticut

Member, Transportation-Air Quality Task Force, Air and Waste Management Association

Member, ASCE Committee on Academic Prerequisites for Professional Practice

Reviewer, 3 Outside Tenure Reviews/1 Outside Appointment Review

Transportation Research Board, Journal Manuscript Reviews

Transportation, Journal Manuscript Reviews

Transportation Research A/D, Journal Manuscript Reviews

Journal of Air and Waste Management, Journal Manuscript Reviews

Environmental Science and Technology, Journal Manuscript Reviews

ASCE Journal of Transportation Engineering, Journal Manuscript Reviews

Journal of the American Statistical Association, Journal Manuscript Reviews

2001-02 NSF Review, Division of International Programs, International Cooperative Science

NSF Biocomplexity Review Panel

Canadian Foundation for Climate and Atmospheric Science, Proposal Review

Member, Committee to Review FHWA BTS Data, National Academy of Science

Member, External Expert Peer Review Group, NCHRP Project 25-15, Transportation Research Board, National Research Council

Member, External Expert Peer Review Group, Washington Department of Transp, Statewide Model

Transportation Research Board, Journal Manuscript Reviews

Transportation Research, Journal Manuscript Reviews

Journal of Air and Waste Management, Journal Manuscript Reviews

2000-01 NSF Infrastructure and Information Systems CAREER Review Panel

**NSF IGERT Review Panel** 

External Reviewer, College of Engineering, Michigan State University

Transportation Research Board, Journal Manuscript Reviews

Transportation, Journal Manuscript Reviews

Journal of Air and Waste Management, Journal Manuscript Reviews

1999-00 Reviewer, Modeling MOBILE Source Emissions, National Research Council, The National Academy Reviewer, EPA Draft Guidance Document: Development of Methodology for Estimating VMT Weighting by Facility Type

Transportation Research Board, Committee on Passenger Travel Demand Forecasting, 1997-Present Microcomputers in Civil Engineering, Journal Manuscript Reviews

Transportation Research, Part A/B/D, Journal Manuscript Reviews

Transportation Research Board, Journal Manuscript Reviews

ORU External Review Committee, Institute of Transportation Studies, University of California, Irvine

1998-99 Transportation Research Board, Committee on Passenger Travel Demand Forecasting, 1997-2002 Microcomputers in Civil Engineering, Journal Manuscript Reviews

Transportation, Journal Manuscript Reviews

Transportation Research, Part A/D, Journal Manuscript Reviews

Transportation Research Board, Journal Manuscript Reviews

1997-98 Transportation Research Board, Committee on Passenger Travel Demand Forecasting, 1997-2002 Transportation Research Board, Committee on Intergovernmental Relations and Policy Processes, 1997-2001

1996-97 Transportation Research Board, Committee on Intergovernmental Relations and Policy Processes, 1997-2001

Professional Engineering Review Course, Transportation

Federal Transit Agency, Invited Participant, TCRP Project H-15: Defining the Research Needed to Support Mobility for the 21<sup>st</sup> Century

Transportation, Journal Manuscript Reviews

Transportation, Part C, Journal Manuscript Reviews

Transportation, Part D, Journal Manuscript Reviews

UCTC, New England Region, Massachusetts Institute of Technology, Proposal Review.

1995-96 Professional Engineering Review Course

Transportation, Part C, Journal Manuscript Reviews

Transportation, Part D, Journal Manuscript Reviews

Microcomputers in Civil Engineering, Journal Manuscript Reviews